

Serial No.: 10/735,777
Examiner: Seungsook Ham

REMARKS/ARGUMENTS

Claims 1-2, 5-8, 10-11, 25-26 and 28-29 remain in this application.

Claims 1, 6, 8, 11, 25, and 28-29 have been rejected under 35 USC 102(b) as being anticipated by Furuta et al. (EP 1 122 807). Applicants' claims have been amended to emphasize the distinctions between their invention and the structure shown by Furuta. The triple-mode resonators of Furuta are not mono-block resonators as the term is used by Applicants and recited in their claims, namely, formed of a dielectric block having a conductive layer on it. The block resonators of Furuta are dielectric-loaded resonators formed by a dielectric block in a metal cavity, with the coupling between various resonators controlled by the dimensions of the cavity and the aperture wall between the cavities. Accordingly, it is submitted that claims 1, 6, 8, 11, 25, and 28-29 as amended are not anticipated by Furuta et al.

Some of the additional limitations introduced into claims 1 and 25 by amendment are similar to those originally found in canceled claim 7, which was rejected under 35 USC 103(a) as being unpatentable over Furuta in view of Tikhov et al. Accordingly, Applicants wish to address the patentability of claims 1, 6, 8, 11, 25, and 28-29 in view of Furuta considered with Tikhov et al. The Examiner has stated, "It would have been obvious to one of ordinary skill in the art to use the metal triple-mode mono-block resonator of Tikhov et al. as the first and second triple-mode mono-block resonators in the device of Furuta et al. to form a waveguide filter assembly, since the triple-mode mono-block resonators of Furuta et al and Tikhov et al are functionally equivalent."

Applicants respectfully disagree. Applicants have conceived that a compact filter could be achieved by using the mono-block structure along with a metal coaxial resonator and coupling between the different kinds of resonators through an aperture formed in the metal coaxial housing and an aperture formed in the conductive layer on a mono-block resonator. Nothing is found in the teachings of either Furuta et al. or Tikhov et al. or the combination of them to suggest the desirability of structuring this arrangement of mono-block resonators and a metal coaxial resonator to obtain the compact filter. Consider that Furuta teaches lining up various

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filter components one after another in the compartments of a housing that defeats the purpose of being compact. Accordingly, it is submitted that 1, 6, 8, 11, 25, and 28-29 are unobvious and patentable in view of Furuta considered with Tikhov et al.

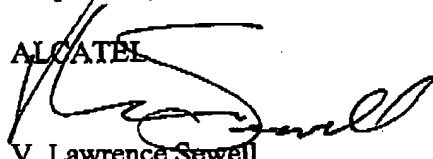
Claims 2, 10, and 26 are rejected under 35 USC 103(a) as being unpatentable over Furuta et al. These claims, dependent on claims 1 and 25, are submitted to be patentable for the reasons given in regard to claims 1 and 25. In addition, there is no teaching or suggestion in Furuta of this arrangement, but it provides an advantage over the arbitrary arrangement of mono-block and metallic coaxial resonators. Applicants have recognized that such an arrangement maximizes the characteristics of the metallic coaxial resonator, such as providing a filter with higher Q or lower loss. Accordingly, it is submitted that the structure of claims 2, 10, and 26 is not obvious in view of Furuta.

It is believed that the foregoing amendment places the Application in condition for allowance; therefore, Applicant respectfully requests withdrawal of the Examiner's rejections and full allowance of same. Should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned to expeditiously resolve any outstanding issues.

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Respectfully submitted,

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